Federal Aviation Administration

Portfolio of Goals
Fiscal Year 2005

Last Modified: February 2, 2005

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Airline Fatal Accident Rate

1. FY 2005 Performance Target: Reduce airline fatal accident rate to 0.023 per 100,000 departures.

2. Flight Plan Objective and Performance Target:

- Safety Objective1: Reduce the commercial airline fatal accident rate.
- Flight Plan Performance Target: Reduce the airline fatal accident rate by 80 percent from the 1994-1996 baseline to a 3-year rolling average rate of 0.010 per 100,000 departures by FY 2007. Reduce the three-year rolling average fatal accident rate below 0.010 by FY 2009.

3. How FAA Measures This Performance Target: Number of fatal air carrier accidents per 100,000 departures. A rolling three-year average of the accident rate is used to measure performance against annual targets. The three-year average is calculated by dividing the number of accidents for previous 36 months involved by the number of departures. Departures for the current fiscal year are based upon estimates supplied by FAA's economic forecasts. This provides the most accurate and up-to-date measure of commercial airline fatal accident rates.

4. Scope of the measure: This measure includes both scheduled and nonscheduled flights of U.S. air carriers (14 CFR Part 121) and scheduled flights of commuter airlines (14 CFR Part 135).

5. Why the FAA chooses to use this measure: The goal to reduce fatal commercial accidents by 80 percent in ten years originated in the final report of the White House Commission on Aviation Safety and Security issued on February 12, 1997. The National Civil Aviation Review Commission in its report, *Avoiding Aviation Gridlock & Reducing the Accident Rate* (December 1997), ratified this goal. In response to these reports, the FAA initiated a joint government-industry analysis of causal factors for aviation accidents. The resulting document, *Safer Skies – A Focused Agenda*, has formed the basis for joint government-industry efforts to reduce the number of accidents in both the commercial and general aviation areas.

6. Source of Data: The data on commercial and general aviation fatal accidents come from the National Transportation Safety Board's (NTSB's) Aviation Accident Database. Aviation accident investigators under the auspices of the NTSB develop the data.

Part 121 and scheduled Part 135 departure data is submitted by carriers to the Office of Airline Information (OAI) within the Bureau of Transportation Statistics (BTS) under 14 CFR Parts 241 and 298, respectively. The airlines submit the data on Form 41, Schedule T-100 – U.S. Air Carrier Traffic and Capacity Data By Nonstop Segment and On-flight Market and Form 41, Schedule T-100 (f) – Foreign Air Carrier Traffic and Capacity Data by Nonstop Segment and On-flight Market. NTSB provides accident data. The fatal accident rate is small and could significantly fluctuate from year to year due to a single accident. Use of an average over three years smoothes the fluctuation that may occur in any given year.

The FAA has no independent data sources to validate BTS-collected departure data. Actual departure data for any given period of time is considered preliminary for up to 12 months after the close of the reporting period. This is due to amended reports subsequently filed by the air carriers. However, the changes to departure data rarely have an effect on the annual fatal accident rate. For internal use only, the FAA must rely on a combination of historical trend data, partial

internal data sources, and the Official Airline Guide (OAG) to project departure data. FAA uses OAG data until official BTS data is available. The air carrier fatal accident rate is not considered reliable until BTS provides preliminary numbers.

NTSB and FAA's Office of Accident Investigation meet regularly to validate the accident count and categorization.

Initially, this goal used the calendar year to keep it in line with the NTSB annual reports. However, FAA switched to a federal fiscal year basis to align with the Department of Transportation's performance reporting cycle.

Note: Most accident investigations are a joint undertaking. NTSB has the statutory responsibility, but, in fact, most of the accident investigations related to general aviation are conducted by FAA Aviation Safety Inspectors without NTSB direct involvement. FAA's own accident investigators and other FAA employees participate in all accident investigations lead by NTSB investigators.

Final Performance Figures: Numbers are final when the NTSB releases its report each March. So for March 2005, FY2003 accident numbers will be finalized. However, the number is not likely to significantly change from the end of each fiscal year to when the rate is finalized.

General Aviation Fatal Accidents

1. FY 2005 Performance Target: Reduce the number of general aviation and nonscheduled Part 135 fatal accidents to 343.

2. Flight Plan Objective and Performance Target:

- Safety Objective 2: Reduce the number of fatal accidents in general aviation.
- Flight Plan Performance Target: By FY 2009, reduce the number of general aviation and nonscheduled Part 135 fatal accidents to no more than 319 (from 385, which represents the average number of fatal accidents for the baseline period of 1996-1998).

3. How FAA Measures This Performance Target: The total number of fatal general aviation accidents. The first baseline of 379, against which future targets were set, was established based on data from the years 1996 to 1998. However, due to a switch in NTSB reporting from calendar to fiscal year and the addition of previously unrecorded fatal accidents, the baseline has been revised to 385.

4. Scope of the measure: This measure is a count of the number of general aviation fatal accidents during the fiscal year. It includes on-demand (non-scheduled FAR Part 135) and general aviation flights. General aviation comprises a diverse range of aviation activities, from single-seat homebuilt aircraft, helicopters, balloons, single and multiple engine land and seaplanes, to highly sophisticated extended range turbojets.

5. Why the FAA chooses to use this measure: The general aviation fatal accident goal was developed by the FAA and general aviation community as an overall measure of the impact of improved safety. Since it does not use a measure of activity to take into account changes in activity levels from year to year, the goal reflects a target based on projected growth in general aviation activity as reported in the FAA's annual General Aviation forecasts.

6. Source of Data: The data on commercial and general aviation fatal accidents come from the National Transportation Safety Board's (NTSB's) Aviation Accident Database. Aviation accident investigators under the auspices of the NTSB develop the data.

The FAA would prefer to use a fatal accident rate rather than fatal accidents as the performance measure because the use of a rate measure would take into account variation in activity levels from year to year. However, unlike commercial aviation activity that is reported regularly to the Bureau of Transportation Statistics by the carriers, general aviation flight hours are based on an annual survey conducted by the FAA. Response to the survey is voluntary. The accuracy of the flight hours collected is suspect and there is no readily available way to verify the data. For these reasons, the General Aviation community is unwilling to use a rate measure until the validity and reliability of the survey data can be assured.

The General Aviation community and the General Aviation Joint Steering Committee of the Safer Skies initiative recommend development of a data collection program that will yield more accurate and relevant data on general aviation demographics and utilization. Improved survey and data collection methodologies have been developed but timeliness of the information continues to be a major bar to its usefulness.

Note: Most accident investigations are a joint undertaking. NTSB has the statutory responsibility, but, in fact, most of the accident investigations related to general aviation are conducted by FAA Aviation Safety Inspectors without NTSB direct involvement. FAA's own accident investigators and other FAA employees participate in all accident investigations lead by NTSB investigators.

Final Performance Figures: Numbers are final when the NTSB releases its report each March. So for March 2005, FY2003 accident numbers will be finalized. However, the number is not likely to significantly change from the end of each fiscal year to when the rate is finalized.

Accidents in Alaska

1. FY 2005 Performance Target: Reduce accidents in Alaska for general aviation and all part 135 operations to no more than 120 per year.

2. Flight Plan Objective and Performance Target:

- Safety Objective 3. Reduce accidents in Alaska.
- Flight Plan Performance Target: Reduce accidents in Alaska for general aviation and all Part 135 operations by 24% by FY 2009 (from the 2000-2002 average of 130 accidents per year to no more than 99 accidents per year).

3. How FAA Measures This Performance Target: The total number of Part 135 and general aviation accidents in Alaska. This is **NOT** a sub-measure of the Reduce General Aviation Fatal Accidents performance target. This measure includes both fatal and non-fatal accidents.

4. Scope of the measure: This measure is a count of the number of general aviation and Part 135 accidents in Alaska during the fiscal year. It includes scheduled and non-scheduled FAR Part 135, as well as general aviation flights. Flight operations in Alaska are diverse and they are responsive to the State's challenging aviation environment and its unique air transportation requirements. The Part 135 operations in Alaska are dominated by single-engine airplanes powered by a reciprocating engine, operated under visual flight rules (VFR), and crewed by one pilot. Operating in rough terrain, adverse weather, and in areas of extreme isolation increase the risks to safe flight operations. The General Aviation operations often use the same types of single-engine airplanes and cope with the same environmental factors as the Part 135 operators.

5. Why the FAA chooses to use this measure: Alaska has a heavy reliance on air transportation in a difficult operating environment. This has led to an unacceptably high accident rate. Reducing accidents in Alaska will have an outsized effect on reducing Part 135 and general aviation accidents system-wide.

6. Source of Data: The data on Part 135 and general aviation accidents come from the National Transportation Safety Board's (NTSB's) Aviation Accident Database. Aviation accident investigators under the auspices of the NTSB develop the data.

Final Performance Figures: Numbers are final when the NTSB releases its report each March. So for March 2005, FY2003 accident numbers will be finalized. However, the number is not likely to significantly change from the end of each fiscal year to when the rate is finalized.

Runway Incursions (A&B)

1. FY 2005 Performance Target: Reduce the number of Category A and B (most serious) runway incursions at towered airports to 36, equivalent to a rate of 0.557 per million operations.

2. Flight Plan Objective and Performance Target:

- Safety Objective 4: Reduce the risk of runway incursions.
- Flight Plan Performance Target: By 2009, reduce the number of Category A and B (most serious) runway incursions to no more than 27, equivalent to a rate 0.390 per million operations.

3. How FAA Measures This Performance Target: A runway incursion is any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of separation between aircraft taking off, intending to take off, landing, or attending to land at an airport. They are grouped in three general categories: operational errors, surface pilot deviations, and vehicle/pedestrian deviations. Runway incursions are reported and tracked at airports that have an operational air traffic control tower. "Operations" are total takeoffs and landings.

The FAA tracks four categories of runway incursions - A, B, C, D - but includes only those with the highest risk of collision, Category A and B incursions, in the measure.

- Category A: Separation decreases to the point that participants take extreme action to narrowly avoid a collision, or the event results in a collision.
- Category B: Separation decreases, and there is a significant potential for a collision.
- Category C: Separation decreases, but there is ample time and distance to avoid a collision.
- Category D: There is little or no chance of collision, but the definition of a runway incursion is met.

4. Scope of the measure: In FY2002 FAA changed the focus of measurement for runway incursions from all incursions to those incursions with measurable risk of collision, Categories A and B. Since Category C and D incursions were not likely to lead to an accident or a significant risk of an accident, their inclusion in the previous total tended to mask true safety risk. The new measure reflects the focus of FAA's runway safety effort to reduce the number and rate of the incursions with demonstrable risk.

5. Why the FAA chooses to use this measure: Runway incursions create dangerous situations that can lead to serious accidents. Reducing the number of runway incursions lessens the probability of accidents that potentially involve fatalities, injuries and significant property damage.

6. Source of Data: Air traffic controllers and pilots are the primary source of runway incursion reports. The data is recorded in the FAA National Incident Monitoring System (NAIMS). Preliminary incident reports are evaluated when received. Evaluation can take up to 90 days.

Composite Safety Index

1. FY 2005 Performance Target: Develop a single, comprehensive index, which provides a meaningful measure of the safety performance of the U.S. civil aviation system, and present the index to the Administrator for approval.

2. Flight Plan Objective and Performance Target:

- Safety Objective 6: Measure the safety of the United States civil aviation system with a composite index.
- Flight Plan Performance Target: By FY2006, implement a single, comprehensive index that provides a meaningful measure of the safety performance of the U.S. civil aviation system.

3. How FAA Measures This Performance Target: For FY 2005, this target will be measured on whether the FAA develops a single composite safety index.

4. Scope of the measure: This measure is concerned with the development of the index, not measuring the index itself.

5. Why the FAA chooses to use this measure: Current accident data is based upon number of accidents and the fatal accident rates. Although most everyone easily understands and accepts these measures, these measures are an incomplete way to gauge the overall risk to people using the aviation system. Fatal accidents are extremely rare, especially major commercial aircraft fatal accidents. A single accident can make a difference between a "good" and "bad" year. Accident rates by themselves make no distinction between relatively minor mishaps and very high-risk events.

Feasible alternatives to rates and fatalities do not exist. Lack of data is one reason. More importantly, we do not have a conceptual model that explains how all variables interact with each other to influence safe or unsafe outcomes. For example, we intuitively believe that an increase in operational errors or runway incursions implies an increased risk of accidents. However, we do not know what a 50 percent or 100 percent increase in operational errors or runway incursions means, if anything.

For this reason, the FAA is developing a single indicator that might provide a quick notion of whether the overall aviation system is doing better or worse relative to past performance. Like the Dow Jones Industrials Index or the S&P 500 index cannot explain a single industry or firm, a safety composite index would not be designed to tell us about a particular segment of the industry or a particular accident type.

The key to developing a comprehensive safety index is gaining approval from all stakeholders, including the aviation industry, OMB and Congress. For this reason, this performance measure focuses on achieving this acceptance by FY 2006.

6. Source of Data: AVS

Commercial Space Launch Accidents

1. FY 2005 Performance Target: Prevent fatalities, serious injuries, or significant property damage to the uninvolved public during licensed space launch and reentry activities.

2. Flight Plan Objective and Performance Target:

- Safety Objective 6: Ensure the Safety of Commercial Space Launches.
- Flight Plan Performance Target: No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed space launch and reentry activities.

3. How FAA Measures This Performance Target: The number of fatalities, serious injuries, or amount of property damage to the uninvolved public that results from a commercial space launch or reentry.

4. Scope of the measure: This measure focuses only on commercial space launch or reentry activities licensed and monitored by the FAA. "Significant" property damage is defined as $25,000 or greater.

5. Why the FAA chooses to use this measure: Commercial space transportation is the means by which payloads such as satellites and remote sensing devices are carried to orbit; these payloads have tremendous benefit to our society. Commercial space launch or reentry accidents can have the potential of major catastrophic consequences, involving large losses of life and property. The public expects to be protected from the potential dangers of commercial space launches and reentry activities. There has not been a single commercial space launch accident since the first DOT licensed launch took place in 1989, and DOT is working to keep this safety record perfect.

6. Source of Data: FAA

Operational Errors (A&B)

1. FY 2005 Performance Target: Reduce the number of Category A and B (most serious) operational errors to no more than 637, equivalent to a rate of 3.92 per million activities.

2. Flight Plan Objective and Performance Target:

- Safety Objective7: Enhance the safety of FAA's air traffic systems.
- Flight Plan Performance Target: By 2009, reduce the number of Category A and B (most serious) operational errors to no more than 563, equivalent to a rate of 3.18 per million activities.

3. How FAA Measures This Performance Target: Number of category A & B (highest severity) operational errors.

4. Scope of the measure: An operational error is a violation of separation standards that define minimum safe distances between aircraft, between aircraft and other physical structures, and between aircraft and otherwise restricted airspace.

The severity of an operational error is determined by a point value established by the severity index. The severity index determines, for operational errors that occur in-flight, the gravity or degree of the violation of the separation standard. Categories within the severity index are determined by the sum of assigned values for vertical and lateral distances, closure rates, and flight paths. There are four categories of severity: Low (Category D), Moderate-Controlled (Category C), Moderate-Uncontrolled (Category B), and High (Category A). The level of air traffic control determines whether a specific flight is classified as Category B (uncontrolled) or C (controlled)

- Category A: Point values sum 90 points or higher.
- Category B: Point values sum 40 – 89 points, and the ATC control factor is determined to be uncontrolled.
- Category C: Point values sum 40 – 89 points, and the ATC control factor is determined to be controlled.
- Category D: Point values sum to 39 points or less.

Several procedures have been used to measure operational errors in the past. Prior to FY 2002, a straight count of all operational errors was used. This measure did not offer any differentiation between a technical violation and more severe operational errors. In FY 2002 only those operational errors with less than 80% separation were used as a control measure, with the presumption that this level of separation measured those operational errors with some degree of risk. Beginning in FY03, the focus was changed to measure those operational errors considered the most severe operational errors – those categorized as A or B.

5. Why the FAA chooses to use this measure: Separation is one of the fundamental principles of aviation safety – the need to maintain a safe distance from other aircraft, terrain, obstructions, and certain airspace not designated for routine air travel.

6. Source of Data: FAA air traffic facilities have a software program called Operational Error Detection Patch (OEDP) that detects possible operational errors and sends alert messages to supervisory personnel. Facility management reviews OEDP alerts and data provided from the

National Track Analysis Program (NTAP) to determine if an operational error has occurred. Controllers are required to report operational errors. The information is summarized in the FAA Air Traffic Operational Error and Deviation Database.

Safety Risk Management (NAS)

1. FY 2005 Performance Target: Apply safety risk management to at least 3 significant changes in the NAS.

2. Flight Plan Objective and Performance Target:

- Safety Objective 7: Enhance the safety of the FAA's Air Traffic System.
- Flight Plan Performance Target: Apply safety risk management to at least 30 significant changes in the NAS by FY 2009.

3. How the FAA Measures This Performance Target: In FY 2004, the FAA developed the FAA Safety Management System (SMS) Manual. This manual describes the requirements for the various components/functions of the SMS, including safety risk management. Safety risk management is a systematic, explicit, and comprehensive approach for managing safety risk at all levels and throughout the entire scope of an operation and lifecycle of a system. It requires the disciplined assessment and management of safety risk. The safety risk management process ensures that safety-related changes are documented; risk is assessed and analyzed; unacceptable risk is mitigated; hazards are identified and tracked to resolution; the effectiveness of the risk mitigation strategies is assessed; and the performance of the change is monitored throughout its lifecycle.

Since these are new requirements, training is necessary to allow the operational service units in the Air Traffic Organization (ATO) to meet them. The ATO will track who attends SMS and safety risk management training. In addition, the ATO Safety Service will measure/track the application of the safety risk management through reviewing data on changes to the National Airspace System (NAS), identifying which are safety-significant, and auditing the application of safety risk management to those changes that are safety significant. In FY 2005, the ATO Safety Service will work with the programs/organizations targeted for initial implementation to ensure that safety risk management is applied to the targeted changes.

4. Scope of the measure: In FY 2004, the FAA developed the FAA Safety Management System Manual. This manual describes the requirements for the various components/functions of the Safety Management System, including safety risk management. The application of safety risk management will be measured against these requirements.

5. Why the FAA chooses to use this measure: Applying safety risk management prior to implementing changes to the National Airspace System (NAS) will ensure that unacceptable risk is not introduced. It will also improve the documentation of the processes used to ensure the safety of the NAS. Training was chosen as a measure because before operational service units can meet safety risk management requirements, they must receive training.

6. Source of Data: The Air Traffic Organization (ATO) Safety Service is working with ATO operational service units to compile a repository of data regarding changes to the National Airspace System (NAS). This data will be used to audit the application of safety risk management.

The ATO Safety Service is working with the ATO Workforce Planning Directorate to track training attendance for both the Safety Management System (SMS) Overview course and the safety risk management practitioner courses.

Additional Requested Information:

a. **Data Source:** See Number 6 above.

b. **Baseline:** The Safety Risk Management (SRM) is a new requirement. The FAA does not have a baseline for the application of SRM. While, FAA organizations apply processes to assure the safety of the National Airspace System, these processes are not specifically SRM as described in the FAA Safety Management System (SMS) Manual. Given the decades long safety record, which demonstrates that the FAA is among the safest airspace system in the world, SRM will build upon these existing processes. The targets were developed based on lessons learned from international service providers, as well as from similar organization-wide implementations in the FAA.

c. **Methodology of Calculation:** The FAA will use counts to measure the number of safety cases developed and the number of employees who have attended training.

Average Daily Airport Capacity at the 35 OEP Airports

1. FY 2005 Performance Target: Increase the average daily arrival plus departure called rates at the 35 OEP airports to 99,892.

2. Flight Plan Objective and Performance Target:

- Capacity Objective 1: Increase capacity to meet projected demand.
- Flight Plan Performance Target: Achieve an average daily airport capacity at the 35 OEP airports of 104,338 arrivals and departures per day by 2009.

3. How the FAA Measures This Performance Target: Average Daily Airport Capacity is the sum of the daily hourly-called arrival and departure rates at the 35 Operational Evolution Plan (OEP) airports per month, divided by the number of days in the month. The annual capacity level for the 35 OEP airports is the weighted sum of the monthly capacity levels.

4. Scope of the Measure: Each airport facility determines the number of arrivals and departures it can handle for each hour of each day, depending on conditions, including weather. These numbers are the called arrival and departure rates of the airport for that hour. Data are summed for daily, monthly, and annual totals.

5. Why the FAA chooses to use this measure: Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay.

6. Source of Data: The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, provides the data for called arrival and departure rates by airport. ASPM data are currently sufficient to complete capacity information for 55 airports, of which the 35 OEP airports are a subset.

Annual Service Volume

1. FY2005 Performance Target: Increase the Annual Service Volume of the 35 OEP airports by at least 1% annually, measured as a five year moving average.

2. Flight Plan Objective and Performance Target:

- Capacity Objective 1: Increase airport capacity to meet projected demand.
- Flight Plan Performance Target: Open as many as seven new runways, while increasing the annual service volume (ASV) of the 35 OEP airports by at least 1% annually, measured as a five-year moving average, through FY 2009.

3. How the FAA measures this performance target: Delay curves were developed for each of the 35 OEP airports for the existing airport layout and with new runways where proposed. Based on an acceptable level of delay, the number of operations that can reasonably be expected to occur at the airport were determined. A consistent calculation technique to estimate capacity was used for all airports. Demand schedules and fleet mixes were developed from recent Official Airline Guide (OAG) information, supplemented with flight counts from airport traffic control tower logs. In addition, standard air traffic control procedures were used for each airport. The Runway Delay Simulation Model (RDSIM) was selected as the simulation model to be used to calculate ASV. The ASV studies have not been recalculated since originally completed, nor is it necessary to do so. Once developed, the delay curves should remain accurate unless a major change in fleet mix or operational characteristics change at the airport.

For those airports where new runways are to be commissioned, the ASV can be estimated any time in the year that the runway will be opened. For example, Orlando International (MCO) and Houston George Bush (IAH) airports were commissioned in the first quarter of FY 2004 and a new ASV was also calculated.

4. Scope of the measure: This measure is applicable to all 35 OEP airports.

5. Why the FAA chooses to use this measure: This measure is calculated as a 5-year moving average. It is calculated this way to smooth out peaks and valleys associated with the yearly variability in new runway openings. The 1998 ASV is the base year. There were no new runways opened in 1999, and the new runways opened at PHL (FY 2000), PHX (FY 2001), and DTW (FY 2002) added 0.78% to overall capacity totaled over those three years. However, the new runways opened in FY 2003 at DEN, MIA, and CLE added an annual increase 2.51% resulting in a five-year moving average of 0.67%. Two new runways were commissioned at MCO and IAH in the first quarter of FY 2004 adding an additional 1.91% annual increase to the nation's capacity resulting in a five-year moving average of 1.07% or an additional 370,000 operations to the system.

6. Source of the data: The NAS Advanced Concept Branch (ACT-540) at the FAA Technical Center in Atlantic City, NJ, through the Office of System Capacity, has provided, and continues to provide, technical support to develop a consistent method of calculating the individual airport ASV.

Adjusted Operational Availability

1. FY 2005 Performance Target: Sustain adjusted operational availability at 99% for the reportable facilities that support the 35 OEP airports.

2. Flight Plan Objective and Performance Target:

- Capacity Objective 1**:** Increase capacity to meet projected demand.
- Flight Plan Performance Target**:** Sustain adjusted operational availability at 99% for the reportable facilities that support the 35 OEP airports.

3. How FAA Measures This Performance Target: Adjusted Operational Availability (OA_{ADJ}) is the ratio of maximum facility/service hours minus all outage time except for improvements (cause code 62 outages) to maximum facility/service hours, expressed as a percent.

$$OA_{ADJ} = \frac{\text{Total Available Hours} - (\text{Total Outage Time} - \text{Code 62 Outage Time})}{\text{Total Available Hours}} \times 100$$

4. Scope of the measure: The National Airspace Performance Reporting System (NAPRIS) facilities necessary to maintain the provision of service in the NAS overall have been determined and are monitored. For this measure, those NAPRS reportable facilities necessary for the provision of service at the 35 OEP airports have been separately measured. Time out of service is adjusted to exclude hours when equipment is unavailable due to scheduled improvement (cause code 62) down time.

5. Why the FAA chooses to use this measure: The availability of the equipment necessary to provide service directly affects the performance of the NAS. Loss of radar or communications equipment will affect the speed and number of aircraft that can be handled where that loss occurs. The ability of the NAS to continually provide guidance is crucial, and affects both safety and capacity. The adoption of this metric has the additional advantage of linking three capacity measures. On-Time NAS Arrivals are affected by the airport and en-route capacity, which are directly impacted by the availability of the equipment and facilities supporting that capacity.

6. Source of Data: The National Airspace System Performance Analysis System (NASPAS). NASPAS was developed to analyze outages of the Air Traffic Control Facilities in the NAS maintained by the FAA. NASPAS receives monthly updates of outage data from the National Outage Database (NODB). The Maintenance Management System (MMS) contains individual equipment outage data as recorded by the system specialist.

Average Daily Airport Capacity for the 8 Metropolitan Areas

1. FY 2005 Performance Target: Increase the average daily arrival plus departure called rates at the eight major metropolitan areas to 43,080.

2. Flight Plan Objective and Performance Target:

- Capacity Objective 2: Increase or improve aviation capacity in the eight major metropolitan area and corridors that most affect system delay.
- Flight Plan Performance Target: Achieve an average daily airport capacity for the eight major metropolitan areas of 44,428 arrivals and departures per day by 2009.

3. How the FAA Measures This Performance Target: Average Daily Airport Capacity at the 8 Metropolitan Areas is the sum of the daily hourly-called arrival and departure rates at the airports in the metropolitan areas of Atlanta, New York, Philadelphia, Los Angeles, San Francisco, Chicago, Baltimore/Washington, and Dallas/Ft. Worth per month, divided by the number of days in the month. The annual capacity level for the 8 Metropolitan Area airports is the weighted sum of the monthly capacity levels.

4. Scope of the Measure: Each airport facility determines the number of arrivals and departures it can handle for each hour of each day, depending on conditions, including weather. These numbers are the called arrival and departure rates of the airport for that hour. Data are summed for daily, monthly, and annual totals.

5. Why the FAA chooses to use this measure: Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay. The selected eight metropolitan areas contain both the most congested airspace and the airports with the greatest constraints on airport expansion. Airport improvements, measured by increases in capacity at these airports, are likely to contribute the most to reduce the causes of system delay.

6. Source of Data: The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, provides the data for called arrival and departure rates by airport. ASPM data are currently sufficient to complete capacity information for 55 airports, of which 20 are included in the metric (ATL, BOS, BUR, BWI, DCA, EWR, HPN, IAD, JFK, LAX, LGA, MDW, OAK, ONT, ORD, PHL, SAN, SFO, SJC, TEB). Data for several of the metropolitan area airports (Islip, NY; Manchester, NH; Providence, RI; Long Beach, CA: and Orange County, CA) are currently unavailable.

NAS On-Time Arrivals

1. FY 2005 Performance Target: Achieve a NAS On-Time Arrival percentage of 87.4% for all flights arriving at the 35 OEP airports, where on-time is equal to or less than fifteen minutes late.

2. Flight Plan Objective and Performance Target:

- Greater Capacity Objective 3: Increase on-time performance of scheduled carriers.
- Flight Plan Performance Target: Through FY 2009, achieve an 88.40% on-time arrival for all flights arriving at the 35 OEP airports, equal to or less than 15 minutes late due to NAS-related delays.

3. How FAA Measures This Performance Target: NAS On-Time Arrival is the percentage of all flights arriving at the 35 OEP airports equal to or less than 15 minutes late, based on the carrier flight plan filed with the FAA, and excluding minutes of delay attributed by air carriers to weather, carrier action, security delay, and prorated minutes for late arriving flights at the departure airport. The adjusted sum of flights arriving on or before 15 minutes of flight plan arrival time is divided by the total number of completed flights.

4. Scope of the measure: A flight is considered on time if it arrives no later than 15 minutes after its published, scheduled arrival time. This definition is used in both the DOT Airline Service Quality Performance (ASQP), and Aviation System Performance Metrics (ASPM) reporting systems. Air carriers, however, also file up-to-date flight plans for their services with the FAA that may differ from their published flight schedules. This metric measures on-time performance against the carriers filed flight plan, rather than what may be a dated published schedule.

The time of arrival of completed passenger flights to and from the OEP 35 airports is compared to their flight plan scheduled time of arrival. For delayed flights, delay minutes attributable to extreme weather, carrier caused delay, security delay, and a prorated share of delay minutes due to a late arriving flight at the departure airport are subtracted from the total minutes of delay. If the flight is still delayed, that delay is attributed to the National Aviation System (NAS) and the FAA, and counted as a delayed flight.

5. Why the FAA chooses to use this measure: On-Time performance is a measure of the ability of the FAA to deliver services. A major weakness of using air carrier scheduled on-time performance as a metric is that it contains flight delays caused by incidents outside the FAA's control. However, the air carriers have supplied the causation of flight delay, by flight, since June 2003 under revised Part 234 instructions. Removal of those delays not attributable to the FAA provides a more accurate and equitable method of measuring the FAA's performance.

6. Source of Data: The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, and supplemented by DOT's ASQP causation data, contains the data for on-time arrivals. By agreement with the FAA, ASPM flight data is filed by certain major air carriers for all flights to and from most large and medium hubs, and is supplemented by flight records contained in the Enhanced Traffic Management System (ETMS) and flight movement times provided by Aeronautical Radio, Inc. (ARINC). Data are sufficient to complete ASPM data files for 55 airports. The 35 OEP airports are a sub-set of these 55 airports.

Oceanic En-route Altitude Change Requests

1. FY 2005 Performance Target: Increase the percent of oceanic en-route altitude change requests that are granted through the end of FY 2005 to 75%.

2. Flight Plan Objective and Performance Target:

- Greater Capacity Objective 3: Increase on-time performance of scheduled carriers.
- Flight Plan Performance Target: Beginning in FY2005, increase the number of oceanic en-route altitude change requests that are granted through the end of FY 2009 to 80%.

3. How FAA Measures This Performance Target:
An oceanic en-route altitude change request is a message sent from the aircraft to ATC requesting a new altitude assignment. For the calculation of this metric, en-route altitude change requests with a response are counted. The request is considered granted if the controller clears the flight to the requested altitude. Clearances to a different altitude are not considered granted. The percent of oceanic en-route altitude change requests granted is calculated by dividing the number of granted requests by the total number of valid requests.

4. Scope of the measure: Oceanic en-route altitude change requests are counted from flights communicating via the High Frequency (HF) Radio Operator and via Controller Pilot Data Link Communications (CPDLC) in Oakland and New York Oceanic airspace.

5. Why the FAA chooses to use this measure: Air carriers and pilots want to change their altitude to minimize fuel burn and flight time. When fuel load or traffic patterns change, it is beneficial for flights to be able to change their altitude in real time. Additionally, the amount of fuel burned on the long oceanic flights is very dependent on whether the flights can fly at their optimal altitude. If oceanic air traffic facilities are getting more requests to change altitudes and can accommodate those requests, that means the system is flexible and responsive to user needs.

6. Source of Data: The Oceanic and Offshore Service Unit uses the Oceanic Data Repository (ODR) and Oceanic Analysis Toolset (OATS) to collect and analyze air/ground messages between controllers and flights communicating via the HF Radio Operator. The data is extracted from Oakland and New York Oceanic System Analysis Recording (SAR) data. This data is supplemented with Oceanic Data Link (ODL) data for the CPDLC air/ground messages between controllers and FANS 1/A flights.

Note: For FY 2005, FAA is investigating using data from ODL for both the HF and CPDLC messages.

Noise Exposure

1. FY 2005 Performance Target: Reduce the number of people exposed to significant noise by 1% (3% cumulative), as measured by a three-year moving average, from the three-year average for calendar year 2000-2002.

2. Flight Plan Objective and Performance Target:

- Greater Capacity Objective 4: Address environmental issues associated with capacity enhancements.
- Flight Plan Performance Target: Reduce the number of people exposed to significant noise by 7% by FY 2009, as measured by a three-year moving average, from the three-year average for calendar year 2000-2002.

3. How FAA Measures This Performance Target: Number of people in the U.S. (in thousands) who are exposed to significant noise levels. Significant noise level is defined as Day Night Sound Level of 65 decibels or more.

4. Scope of the measure: Residential population exposed to aircraft noise above Day Night Sound Level of 65 decibels around U.S. airports.

5. Why the FAA chooses to use this measure: Mitigating noise directly impacts our ability to increase capacity. Although building new runways is the best way to increase capacity, communities and local government are reluctant to build them if they impose increased aircraft noise exposure. By mitigating and reducing exposure to excessive noise, the FAA can help communities accept more runways in their areas.

6. Source of Data: In 1981, the FAA issued 14 CFR Part 150, Airport Noise Compatibility Planning, and as part of that regulation, formally adopted Day Night Sound Level. Day Night Sound level, abbreviated as DNL and symbolized as Ldn, is the 24-hour average sound level, in decibels (dB), obtained from the accumulation of all events with the addition of 10 decibels to sound levels in the night from 10 PM to 7 AM. The weighting of the nighttime events accounts for the increased interfering effects of noise during the night when ambient levels are lower and people are trying to sleep. In the promulgation of 14 CFR Part 150, the FAA also published a table of land uses that are compatible or incompatible with various levels of airport noise exposure in DNL. This table established that levels below DNL 65 dB are considered compatible for all indicated land uses and related structures without restriction.

In 1997, the FAA initiated a project to collect airport noise analysis databases for a large number of the world's airports. This sample database of airports would be the basis for assessing worldwide trends that would occur as the result of stringency, different land-use planning initiatives and operational procedures. The objective was to develop a tool that could be used by the Committee on Aviation Environmental Protection (CAEP) under the International Civil Aviation Organization (ICAO). Previous attempts by CAEP to globally assess aircraft noise exposure had limited success. The proposed FAA methodology had much more promise, as the number of sample databases was large and has since grown to around 200. Furthermore, a generalized methodology was included to account for airports for which noise databases did not exist. Based on the initial success of the FAA activity, the fourth meeting of CAEP (CAEP4) recommended that a task group be formed to complete the development of this tool for CAEP analysis.

This group and subsequently the model became known as MAGENTA (Model for Assessing Global Exposure form Noise of Transport Airplanes). The MAGENTA population exposure methodology has been thoroughly reviewed by this ICAO task group and was validated for several airport specific cases. MAGENTA played an important role in the setting of new international aircraft noise standards by CAEP in 2001. CAEP used MAGENTA to assess the benefits (reduction in number of people exposed to aircraft noise) of several noise stringency proposals. FY2000 was the first year MAGENTA was used to track the aircraft noise exposure goal in the DOT Performance Plan.

The MAGENTA model is applied using U.S. population data from the Department of Commerce Census Data, locally developed traffic distribution (route and runway utilization), and aircraft distributions developed using the Enhanced Traffic Management System (ETMS), Terminal Area Forecast (TAF) and current aircraft registration databases. The local traffic utilization data is available for the busiest U.S. airports in the form of studies developed for the FAA's Integrated Noise Model (INM). For smaller airports, a generic statistical procedure was employed.

The number of people exposed to significant noise levels was reduced by about 90% between 1975 and 2000. This is due primarily to the legislatively mandated transition of airplane fleets to newer generation aircraft that produce less noise. Most of the gains from quieter aircraft were achieved by FY 2000. The remaining problem must be addressed primarily through airport-specific noise compatibility programs, using measures such as soundproofing and relocation of residences. The FAA is authorized to provide funds for these purposes. However, each project must be locally sponsored and be a part of a noise compatibility program prepared by the airport sponsor and approved by the FAA. The data for this measure reflects relocation of people from the DNL 65 contour since 2000.

Aviation Fuel Efficiency

1. FY 2005 Performance Target: Improve aviation fuel efficiency per revenue plane-mile by 1% per year through FY 2009, as measured by a three-year moving average, from the three-year average for calendar years 2000-2002.

2. Flight Plan Objective and Performance Target:

- Greater Capacity Objective 4: Address environmental issues associated with capacity enhancements.
- Flight Plan Performance Target: Improve aviation fuel efficiency per revenue plane-mile by 1% per year through FY 2009, as measured by a three-year moving average, from the three-year average for calendar years 2000-2002.

3. How FAA Measures This Performance Target: FAA measures this target using SAGE – the System for assessing Aviation Global Emissions, which is a computer model that estimates aircraft fuel burn and emissions for variable-year emissions inventories and for operational, policy, and technology-related scenarios. For this target, SAGE is used to generate fuel burn and total distance flown data annually for all U.S. commercial operations.

In FY 2004 the baseline fuel efficiency was calculated by averaging fuel burn for calendar years 2000-2002 and dividing by average total distance flown. FY 2004 performance was calculated for the three years (2001-2003), dividing average fuel burn by average total distance to determine the three year efficiency average. FY 2004 performance was calculated to be a 4.5% improvement in fuel efficiency for the three year efficiency average (2001-2003) as compared to the baseline. For FY 2005 performance a three year average for 2002-2004 will be calculated and compared against the baseline and the FY 2004 performance for trend analysis.

4. Scope of the measure: This measure focuses on all U.S. commercial operations.

5. Why the FAA chooses to use this measure: Although today's aircraft are up to 70% more efficient than early commercial jet aircraft, there is growing attention being given to aviation's impact on the environment. Aviation is currently viewed as a small contributor to those greenhouse gas emissions that have the potential to influence global climate. However the science involved with these emissions in the upper atmosphere is still evolving and many uncertainties still exist. Carbon dioxide (CO_2) emissions are a primary greenhouse gas and are directly related to the fuel burned during the aircraft's operation. Measuring and tracking fuel efficiency from aircraft operations will allow FAA to monitor improvements in aircraft/engine technology and operational procedures, and enhancements in the airspace transportation system, thereby providing an assessment of their influence on reducing aviation's emissions contribution.

6. Source of Data: AEP (SAGE system)

Aviation Safety Leadership

1. FY 2005 Performance Target: Advance U.S. aviation safety leadership in developing regions by significantly increasing safety infrastructure in 2 priority countries through implementation of model law and regulations for safety oversight, extensive technical assistance and training activity, and concluding bilateral agreements.

2. Flight Plan Objective and Performance Target:

- International Leadership Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral, regional, and multilateral partners.
- Flight Plan Performance Target: Advance U.S. aviation safety leadership in developing regions by significantly increasing safety infrastructure in 10 priority countries by 2009 through implementation of model laws and regulations for safety oversight, extensive technical assistance and training activities, and bilateral agreements.

3. How this performance measure helps achieve the objective: FAA technical cooperation activities with China and India during FY 2005 helps advance U.S. aviation safety leadership with two of the largest and fastest-growing aviation markets in the world. These activities also enable these nations to meet international safety standards and provide strong and sustainable aviation safety oversight which benefits U.S. travelers and air carriers.

4. How is the target measured: The target is achieved when China strengthens its aviation safety oversight as a result of FAA technical assistance and when India concludes an agreement with FAA for technical assistance to improve its aviation safety infrastructure.

5. Why the FAA chooses to use this measure: No data

6. Source of Data: API. Point of contact: Peter Keefe, 202-385-8860

Bilateral Agreements (Products and Services)

1. FY 2005 Performance Target: Conclude two new or expanded bilateral agreements with current partners.

2. Flight Plan Objective and Performance Target:

- International Leadership Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral, regional, and multilateral partners.
- Flight Plan Performance Target: Conclude four new or expanded bilateral agreements with current partners by 2009.

3. How this performance measure helps achieve the objective: The purpose of a Bilateral Aviation Safety Agreement (BASA) is to promote aviation safety and environmental quality and to enhance cooperation and increase efficiency in matters related to civil aviation. By building a network of competent civil aviation authorities and concluding agreements with additional countries and/or regional authorities, the FAA can increase safety globally. Improved global understanding of U.S. safety regulations, processes, and procedures leads to better international regulatory oversight. Since the BASAs are based on a recognition of comparability of the U.S. and foreign systems for approval and surveillance of aviation industry, the BASAs allow the FAA to rely upon capabilities and technical expertise of other civil aviation authorities in particular areas of aviation safety, thereby minimizing duplication of efforts as well as opening new lines of communication between authorities. In doing so, the FAA can better focus on U.S. safety priorities and rely on competent civil aviation authorities for those activities taking place overseas.

4. How is the target measured: The BASA is comprised of two parts: an executive agreement signed by the Department of State and the Ministry of Foreign Affairs, and one or more implementation procedures signed by the FAA and the other civil aviation authority. The target is achieved when the executive agreement and at least one implementation procedure is concluded with a given country or regional authority. In 2005, we will sign two BASA Executive Agreements, each with at least one implementation procedures.

5. Why the FAA chooses to use this measure: No data.

6. Source of Data: API. Point of contact: Peter Keefe, 202-385-8860

Intellectual and Financial Assistance

1. FY 2005 Performance Target: Secure an increase of 20% year after year in intellectual and financial assistance for international aviation activities from the United States and international government organizations, multilateral banks and industry.

2. Flight Plan Objective and Performance Target:

- International Leadership Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral, regional, and multilateral partners.
- Flight Plan Performance Target: Secure an increase of 20%, year after year, in intellectual and financial assistance for international aviation activities from the United States and international government organizations, multilateral banks and industry.

3. How FAA Measures This Performance Target: Twenty percent over FY04 levels is about $7.2 million. The success of this effort is measured in terms of amount of new funding which the agency secures for international aviation infrastructure projects. External funding institutions will often transfer funds directly to the FAA, but it is not necessary that the FAA manage the actual financial transactions. The important metric is the amount of external funding that the FAA identifies and directs toward critical aviation infrastructure projects.

4. How is the target measured: Achieving a 20% increase in external funding in FY 2005 compared to FY 2004.

5. Why the FAA chooses to use this measure: No data.

6. Source of Data: API. Point of contact: Peter Keefe, 202-385-8135

Support ICAO (Regional Aviation Authorities)

1. FY 2005 Performance Target: Support the creation of 2 new regional aviation authorities or organizations capable of meeting globally-accepted safety standards.

2. Flight Plan Objective and Performance Target:

- International Leadership Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral, regional, and multilateral partners.
- Flight Plan Performance Target: Promote the creation of four new regional aviation authorities or organizations capable of meeting globally accepted safety standards.

3. How this performance measure helps achieve the objective: Creation of regional mechanisms that enable States to comply with international standards. These mechanisms can foster the harmonization of laws and regulations, facilitating the process for sharing initial resources through the creation of regional mechanisms, countries with limited financial and human resources are able to pool their resources to enable countries to comply with international standards. With these additional resources and the opportunity to comply with international standards, greater safety for US operators and US citizens flying overseas is achieved. Additionally, accident rates will be reduced, and aviation traffic will expand.

4. How is the target measured: This objective will be measured by the creation of four internationally recognized regional mechanisms. These mechanisms are established through agreements between the Member States.

5. Why the FAA chooses to use this measure: No data.

6. Source of Data: API. Peter Keefe, 202-385-8860

NAS Technologies

1. **FY 2005 Performance Target:** Expand the use of U.S. National Airspace System (NAS) technologies and procedures to one (1) priority country.

2. **FY2005-09 Flight Plan Objective and Performance Target:**

   - International Leadership Objective 2: Promote seamless operations around the globe in cooperation with bilateral, regional, and multilateral aviation partners.
   - Performance Target: Expand the use of U.S. National Airspace System (NAS) technologies and procedures to six (6) priority countries by 2009.

3. How FAA Measures This Performance Target: In 2005, the FAA will assist one (1) priority country with the implementation and/or use of U.S. NAS technologies and procedures. The FAA will expand this promotion of U.S. NAS technologies and procedures to an additional (1) priority country in each of 2006, 2007, and 2008, and then two (2) countries in 2009.

4. Scope of the Measure: The four (4) Flight Plan Initiatives and related "strategic labeled" activities supporting this performance target are:

- Initiative 1: Encourage adoption of enabling technologies and processes to improve safety of flight operations.
  - Initiate development of a runway safety manual by August 2005.
  - Expand the U.S. WAAS regionally with the initial installation of reference stations in Canada and Mexico by September 2005
  - Develop a bilateral agreement with India to support the implementation of the India Satellite Based Augmentation System (GAGAN) by September 2005.
  - Provide MTSAT Satellite Augmentation System (MSAS) certification roadmap to the Japan Civil Aviation Bureau (JCAB) by September 2005.
  - Complete signature on Memorandum of Agreement (MOA) between the FAA and Indian Ministry of Civil Aviation by fourth quarter FY2005.
  - Complete AIDC implementation at ZAN by September 2005.
- Initiative 2: Develop and implement capacity enhancing applications, embracing current operational capabilities to the maximum extent possible.
  - Assist ATMB to enhance airspace capacity in China through 1 on-the-job familiarization program by September 2005.
  - Provide training to ATMB on implementation of Reduced Vertical Separation Minimum (RVSM) by September 2005.
  - Demonstrate area navigation (RNAV)/RNP applications via educational seminars or concept demonstrations in at least one country by May 2005.
  - Provide initial recommendations on a set of common global definitions for RNP to ICAO by May 2005. Finalize global definitions for RNP by September 2005.
- Initiative 3: Improve interoperability of automation tools and operational procedures to increase user flexibility and optimize efficiencies.
  - Expand automated exchange of ICAO flight plan data between Albuquerque Center, Los Angeles Center, and Mazatlan Center in Mexico by September 2005.

  - Deliver requirements database to ICAO Air Traffic Management Concept of Operations Panel to support publication of global air traffic management requirements by June 2005.
  - Achieve ATOP 30/30 system software acceptance at Oakland by June 2005.
  - Complete the FAA/EUROCONTROL Technology Pre-screening Evaluation process identifying viable candidate solutions for a common set of air-ground communications operational requirements by March 2005.
  - Create RTCA Air Traffic Management Advisory Committee and the RTCA Air Traffic Management Steering Group with appropriate international representation by December 2004.
  - Develop initial plan for AIFPE with Mexico by September 2005.

- Initiative 4: Promote key safety and efficiency technologies and procedures on a global basis, including, RNP/RNAV, GNSS, and RVSM.
  - Launch initiative during the 35th ICAO General Assembly and follow with a meeting with Canada and Mexico at Ixtapa by January 2005. Develop a plan for introducing harmonized approach to other countries in the region at the next ICAO GREPECAS meeting by September 2005.

5. Why the FAA chooses to use this measure: By working with international civil aviation agencies, organizations and States, the FAA can continue to enhance its international leadership role by further encouraging the adoption of U.S. National Airspace System (NAS) technologies and procedures. This harmonization of aviation systems globally will increase the safety, capacity and efficiency of international aviation not only for U.S. carriers, but also for U.S. citizens traveling on foreign flag carriers.

6. Source of Data: FAA Air Traffic Organization (ATO)

Global Environmental Standards

1. FY 2005 Performance Targets: (1) Reach agreement with other ICAO Committee on Aviation Environmental Protection members on approach to evaluate the use of existing models and potential models under development (for example, AEDT-APMT) for the analysis of trade-offs between noise and emissions and amongst emissions. (2) Determine the feasibility of building upon the draft ICAO Circular on Operational Opportunities to Minimize Fuel Use and Reduce Emissions with a view to expand the use of the most cost-effective practices industry wide and to explore their use as a basis for future voluntary agreements.

2. Flight Plan Objective and Performance Target:

- International Leadership Objective 2: Promote seamless operations around the globe in cooperation with bilateral, regional, and multilateral aviation partners.
- Flight Plan Performance Target: Ensure that international environmental standards, recommended practices, and guidance material adopted by ICAO are globally and uniformly applied, reflect the best available technology, provide real environmental benefit, and are economically sound.

3. How FAA Measures This Performance Target: Successful adoption of an internationally agreed approach on these issues acceptable to the U.S.

4. Scope of the measure: This measure covers the critical phase of an internationally acceptable approach to dealing with environmental standards, practices, and guidance material across the world. Agreement at these bodies is essential to permitting a harmonized international approach.

5. Why the FAA chooses to use this measure: The lack of international harmonization on environmental standards and practices creates significant difficulties to the effective operation of an industry which has an aircraft take-off somewhere in the world every few seconds. It also can result in misapplication of limited regulatory and financial resources in a manner that does not achieve cost-effective solutions to deal with aviation's environmental impacts. It is also important to ensure that internationally agreed standards and practices are acceptable to the U.S.

6. Source of Data: AEP

Employee Attitude Survey

1. FY 2005 Performance Target: There is no FY 2005 performance target, as any interim target (about +1%) would be too small to be measured reliably. By FY 2006, the Employee Attitude Survey scores in the areas of management effectiveness and accountability will increase by at least three percent positive compared to these items from the FY 2003 EAS administration.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 1: Make the organization more effective with stronger leadership, increased commitment of individual workers to fulfill organization-wide goals, and a better prepared, better trained, diverse workforce.
- Flight Plan Performance Target: Increase Employee Attitude Survey scores in the areas of management effectiveness and accountability by at least 5%.

3. How FAA Measures This Performance Target: The overall increase in percent positive, for twelve specific EAS items, compared to the baseline score, 35%, of the FY 2003 Employee Attitude Survey. The next performance target is due after the FY 2006 EAS administration. There is no FY 2005 performance target as explained under 1.

4. Scope of the measure: This measure focuses on the management effectiveness and accountability sections of the Employee Attitude Survey. The survey is given every other year. The next administration will occur in FY 2006.

5. Why the FAA chooses to use this measure: The Employee Attitude Survey is the main tool the FAA uses to determine what its employees believe about the FAA. One of the FAA's objectives is to make management more accountable and more effective. The Employee Attitude Survey is one way to measure whether that has, in fact, occurred.

6. Source of Data: AHR, which collaborates with the Civil Aerospace Medical Institute (CAMI) on the EAS program. CAMI analyzes EAS data and provides the percent positive results for the12-item metric. AHR coordinates the application of the results.

Performance Plans Aligned

1. FY 2005 Performance Target: Directly relate 85 percent of all employee performance plans to FAA strategic goals and their organization's performance.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 1: Make the organization more effective with stronger leadership, increased commitment of individual workers to fulfill organization-wide goals, and a better prepared, better trained, safer, diverse workforce.
- Flight Plan Performance Target: Directly relate 100% of all employee performance plans to FAA strategic goals and their organization's performance plans.

3. How FAA Measures This Performance Target: The number of performance plans that are directly linked to FAA strategic goals and their organization's performance plans.

4. Scope of the measure: All FAA employees, managers, and executives.

5. Why the FAA chooses to use this measure: Traditionally, many FAA employees have had a difficult time seeing how their day-to-day activities helped influence the FAA in accomplishing its mission. By aligning individual performance plans to organizational and FAA goals, there is a clear path to how individuals and organizations contribute to accomplishment of the FAA Flight Plan goals.

6. Source of Data: AHR

Mission Critical Positions

1. FY 2005 Performance Target: Reduce the time it takes to hire mission critical positions by 6% of the FY2003 Baseline of 81 Median Days.

Table 2. Proposed decrease in Time-to-Hire performance target relative to FY03 baseline for Mission Critical Positions by Fiscal Years 2005-2009:

	FY 05	FY 06	FY 07	FY 08	FY09
Goal Pct Improvement	6%*	10%*	15%*	20%*	20%*
Goal In Median Days	76	73	69	65	65
Achievement	TBD	TBD	TBD	TBD	TBD

*All targets are computed using the FY03 Baseline Measure of 81 Median Days.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 1: Make the organization more effective with stronger leadership, increased commitment of individual workers to fulfill organization-wide goal, and a better-prepared, better-trained, diverse workforce.
- Flight Plan Performance Target: Reduce the time it takes to fill mission critical positions by 20% over the FY 2003 baseline and maintain this rate in FY 2009.

3. How FAA Measures This Performance Target: Three elements comprise measuring this performance target: the target positions, the measure, and the criterion.

- Mission Critical Positions (MCPs) include: Aviation Safety Inspectors (1825s), Engineer/Electronics Technicians (802/856s), Transportation Specialists (2101s), IT Specialists (334s and 1550s), and Engineers (800s). Air Traffic Controllers (2152s) are currently being studied to help determine a standard for their hire process. The MCPs represent about 80% of the onboard FAA workforce.

- The Time-to-Fill measure for MCPs is the total number of days it takes from the date an action to fill a position is requested by the hiring organization to the date that the job is offered to the individual who fills the job. Time-to-Fill MCPs is tracked nationally using a web-enabled database and the performance data are analyzed by AHR.

- We have established an efficiency criterion to reduce the median number of days to fill MCPs in annual increments totaling 20% by FY 2008 and maintaining this level for FY 2009. We will compute medians for each MCP and a total median for all MCPs comparing them to the baseline measure to determine if the percent reduction meets the performance goal.

- The Time to Hire measure is computed by fiscal year with quarterly checks to track the status in order to align itself with FAA and DOT administrative requirements.

4. Scope of the Measure: Analyses performed through FY03 and FY04 found the pattern in time and process for filling Air Traffic Control positions different from the other mission critical positions. Air Traffic Controllers are currently being studied by an HR and AT workgroup to determine where efficiencies might be found and whose results will be used to set a fair and challenging standard for filling Air Traffic Controller positions. Therefore, the measure includes all MCPs listed above except Air Traffic Controllers. Once the study is complete, we will consider whether Air Traffic Controllers should be analyzed separately or reintroduced into the analysis with the other mission critical positions.

5. Why the FAA chooses to use this measure: One crucial element of assuring safety through organizational excellence is to fill MCPs using an efficient and quality hiring process. In addition, the anticipation of a retirement increase, with more employees reaching eligibility each year, provides even more impetus to fill positions more efficiently. Measuring how long it takes to fill is a critical first step in improving the process, which is important to achieving the Agency's mission and strategic goals.

6. Source of Data: Human Resources staffing specialists across the country enter the Time to Fill data throughout the year into a website database. The database provides a secure record of the time it takes to fill positions and allows optimal flexibility in managing and analyzing the stored information. We collect additional descriptive information besides the amount of time for the hiring process, which enables us to locate delays in the process steps, as well as examine how we are doing by Region, Line of Business, and Hiring Vehicle (e.g., via announcement or direct hire authority). Maintaining annual records allows us to compare performance, year by year.

Cost Control

1. FY 2005 Performance Targets: Develop and implement a centrally managed and highly visible cost control program to lead the agency in reducing costs. Each FAA organization will contribute at least one cost reduction activity each year to its Business Plan with measurable, significant cost savings.

2. Flight Plan Objectives and Performance Target:

- Organizational Excellence Objective 2: Control costs while delivering quality customer service.
- Flight Plan Performance Target: Develop and implement a centrally managed and highly visible cost control program to lead the agency in reducing costs. Each FAA organization will contribute at least one cost reduction activity each year to its Business Plan with measurable, significant cost savings.

3. How FAA Measures This Performance Target: Each FAA organization will have a cost control activity in their Business Plan. The Office of the Assistant Administrator for Financial Services/CFO, through the Office of Financial Controls, will monitor progress against these organizational targets to assure that the cost control contributions are defined, measured and achieved.

4. Scope of the measure: The Office of Financial Controls will be established in the Office of the Assistant Administrator for Financial Services/CFO and will provide cost control program leadership to all organizations in the FAA.

5. Why the FAA chooses to use this measure: FAA's operating costs have increased significantly over the past decade. Furthermore, the IG and GAO have identified our escalating operating costs as an issue. To create a more effective organization capable of meeting the future needs of the public and industry, the FAA must take aggressive action now to stem the growth of operating costs. A centrally developed and led initiative, under the executive direction of the agency's Chief Financial Officer, will provide the impetus for successful and sustained cost control activities.

6. Source of Data: ABA

Cost Reimbursable Contracts

1. FY 2005 Performance Target: Close out 85% of eligible cost reimbursable contracts during each fiscal year.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 2: Control costs while delivering quality customer service.
- Flight Plan Performance Target: Close out 85% of eligible cost reimbursable contracts during each fiscal year.

3. How FAA measures this Performance Target: By tracking the number of cost reimbursable contracts that are completed and therefore become eligible for closeout during FY 2005. By 30 September 2005, ensure that 85% of that number drawing from the cumulative inventory of contracts eligible for closeout, are closed.

4. Scope of the measure: Based on data from FY04, it is estimated that 96 cost reimbursable contracts will become eligible for closeout in FY05. At least 85% of 96 or 82 contracts will be closed out by 30 September 2005.

5. Why the FAA chooses to use this measure: It is good contract business practice, Federal Government-wide, to closeout cost reimbursement contracts within 36 months of their completion.

6. Source of Data: The FAA will use its Global Contracts List (GCL) database, as well as its procurement/acquisition system PRISM to track contracts becoming eligible for closeout as well as actual closeouts accomplished by its contracting officers. The FAA's closeout support contractor submits a quarterly report that includes the number of contracts that it has closed. All three of these sources will be used.

Critical Acquisitions On Schedule and Budget

1. FY 2005 Performance Target:

a. Make sure 80% of critical acquisition programs are on schedule.
b. Make sure 80% of critical acquisition programs are within 10% of budget as reflected in the Capital Investment Plan (CIP)

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 3: Make Decisions based on reliable data to improve our overall performance and customer satisfaction.
- Flight Plan Performance Target:
  - By FY 2009, 90% of major system acquisition investments are within 10% of budget.
  - By FY 2009, 90% of major system acquisition investments are on schedule.

3. How FAA Measures This Performance Target: FAA's Air Traffic Organization (ATO) Service Units select specific milestones and completion dates against programs that have been determined critical to meeting the Agencies 80% Acquisition performance goal. For FY2005, Cost and Schedule targets will be tracked and reported as separate entities. The Schedule target is measured by dividing the total number of missed milestones by the total number of milestones being tracked. The Cost target is measured by comparing the total F&E budget at completion as reflected in the January 2005 CIP against the projected Budget at Completion published in the August 2005 CIP. The January 2005 CIP reflects the FY06 Presidents Budget and the September 2005 CIP reflects the FY07 OST passback. Any program with a total variance of more than the 10% threshold would be considered not meeting the 90% Cost performance target.

4. Scope of the measure: The Schedule measure is set to only those milestones selected. No milestones are added during the year. The Cost measure is set to the January 2005 CIP.

5. Why the FAA chooses to use this measure: This measure is a DOT measure. The requirement began in FY 2003 as an initial effort to begin developing efficiency metrics.

6. Source of Data: ATO tracks and reports status of all schedule and cost performance targets using an automated database. ATO Service Units provide a monthly Red, Yellow, or Green report that indicates their confidence level in meeting their established milestones. Comments are provided monthly that detail problems, issues, and corrective actions to ensure milestones and cost are maintained within the established performance target. The performance status is reported monthly to the FAA Administrator in high level FAA Flight Plan meetings.

Flight Plan (Performance Targets Achieved)

1. FY 2005 Performance Target: Achieve 90 percent of FY 2005 performance targets.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 3: Make decisions based on reliable data to improve our overall performance and customer satisfaction.
- Flight Plan Performance Target: Achieve 90% of all performance targets in the Flight Plan.

3. How FAA Measures This Performance Target: The number of performance targets met in a fiscal year divided by the number of performance targets measured.

4. Scope of the measure: The FAA Flight Plan 2005-2009 contains 33 performance targets. Only the first of two targets under the Commercial Airline Accident Rate target are being tracked this year; the second applies to FY 2008 and 2009. The present performance target rolls up the results of the others, so is not counted in the total. Finally, another performance target, the Employee Attitude Survey (EAS), is not being taken this year. The FAA is investigating using results of an interim survey to be taken this year, judging EAS success by completion of supporting initiatives and activities, or dropping the measure for FY05 and bringing it back in FY06, when the survey will be taken again. Therefore, to achieve 90 percent, the FAA needs to accomplish either 28 of the 31 performance targets or 27 of 30 targets, depending on the EAS decision.

5. Why the FAA chooses to use this measure: If the Flight Plan is to be a real driver of the FAA's performance, the FAA needs to measure how well it is accomplishing the goals. Also, the FAA ties this measure directly to employee pay. Employees under Core Compensation receive a full Organization Success Increase (OSI) only if FAA achieves this target.

6. Source of Data: AEP and the FAA PBViews database.

Customer Satisfaction (ACSI)

1. FY 2005 Performance Target: Achieve an Agency score on the American Customer Satisfaction Index (ACSI) of 64 or higher.

2. Flight Plan Objective and Performance Target:

- Organizational Excellence Objective 3: Make decisions based on reliable data to improve our overall performance and customer satisfaction.
- Flight Plan Performance Target: Increase agency scores on the American Customer Satisfaction Index.

3. How FAA Measures This Performance Target: The ACSI is a national indicator of the quality of goods and services available to the American public. The ACSI score is a weighted average measuring overall satisfaction, customer expectations, and perceived quality.

4. Scope of the measure: A telephone survey is conducted on a sample of 260 commercial pilots drawn from a random subset of certified airmen. Commercial pilots are asked about air traffic control personnel and services, pilot certification processes, the clarity of regulations, and how regulations contribute to aviation safety.

5. Why the FAA chooses to use this measure: Many federal government agencies, including the FAA, began participating in the ACSI in 1999. Participation in the survey over a period of four years has enabled the FAA to compare its customer satisfaction scores to other regulatory agencies and private industry.

FAA's baseline is from 1999, the first year the FAA survey was conducted. In 1999 the score for commercial pilots was 58.

The 2004 ACSI for commercial pilots is 65 on a 0-100 scale. Since the baseline measurement in 1999, the ACSI is up a total of 7 points. Although FAA's ACSI remains significantly below the national ACSI of 71.6 for private sector services, the score of 64 is consistent with government agencies that have a regulatory and enforcement function.

6. Source of Data: ACSI is produced by the National Quality Research Center at the University of Michigan Business School, American Society for Quality, and the consulting firm CFI Group.

Agency Information Security Plan

1. FY 2005 Performance Target: Zero cyber security events that significantly disable or degrade FAA services.

2. Flight Plan Objectives and Performance Target:

- Organizational Excellence Objective 3: Make decisions based on reliable data to improve our overall performance and customer satisfaction.
- Flight Plan Performance Target: Zero cyber security events that significantly disable or degrade FAA service.

3. How FAA Measures This Performance Target: The FAA has an information security concept to protect the agency's IT assets in accordance with numerous executive and legal requirements, including the Computer Security Act, Executive Order 13231, and the Federal Information Security Management Act (FISMA), as well as in accordance with DOT and FAA policy. The agency's cyber-defense "android" concept is the framework for all the activities to protect the FAA information infrastructure. The attention for FY05 will be in the area of protecting FAA services through the use of element hardening including certification & accreditation, remediation of targeted vulnerabilities, identity management, establish and manage partnerships with other government agencies (national and international). The six activity targets related to information security for FY05 include:

- Leverage partnerships with at least three government agencies or academia to transition (at least $20 million) cyber-security/IT research and development to the benefit of the FAA.
- By June 30, 2005, certify and authorize (C&A) 100 percent of the remaining operational IT systems not C&A'd in FY04; also, by September 30, 2005, ensure that 30% of the systems listed in the IT systems inventory (273) have either an initial certification and authorization or a recertification signed in FY05.
- Remediate 20 percent of targeted vulnerabilities as identified in the DOT portal (DISP) as of October 2004.
- On September 30, 2005, achieve 0.10 or fewer "high vulnerabilities, as measured against the SANS Top 20, for the targeted network servers.
- Establish an enterprise identity management, E-Authentication Logical Access program (develop for approval a mission needs statement, an operational requirements document, and a concept of operations), in order to comply with HSPD-12.
- Achieve evaluation levels in the DOT/FISMA annual report that permit us to remain "green" on the PMA E-Gov scorecard.
- Sign a memorandum of cooperation with Eurocontrol to share cyber-security technical and operational data, techniques, tactics, and procedures, and to work cooperatively towards better business practices.

4. Scope of the measure: The measure is applicable to agency's information technology assets, including National Airspace System and administrative systems which contribute to the delivery of FAA services.

5. Why the FAA chooses to use this measure: International terrorism threatens national security. Several nations are capable of launching cyber attacks against the United States. Hackers and criminals are leveraging vulnerabilities exploitable through the Internet at an ever-accelerating rate. The FAA, as an important element of the nation's critical infrastructure, needs to be protected against these threats. AIO has the agency lead for ensuring that cyber attacks do not significantly disable or degrade FAA services.

6. Source of Data: AIO